























DIVISION OVERVIEW

The purpose of the Engineering Division is to perform design functions in the matter of construction, maintenance, and capital improvement projects undertaken by the City. Capital improvements include new construction projects or major replacements/repairs. The Engineering Division reviews project designs, monitors construction, and approves inspections. Other tasks include watershed studies, property easement acquisitions, right of way development, grant application processing, and plan review.

2012 Capital Improvement Projects

Buckles Court – Buckles Court is a public roadway that extends south of the newly constructed Techcenter Drive. The roadway was installed with sidewalks and street lighting. A traffic signal will be installed at the intersection of Buckles Court and Techcenter Drive in spring of 2013.







Techcenter Commons Public Watermain Improvements – This project installed 1610 linear feet of waterline to connect the waterline on the north side of Techcenter Dr to the existing waterline that crosses I-270. This created a loop in the waterline network to provide consistent pressure and system redundancy.









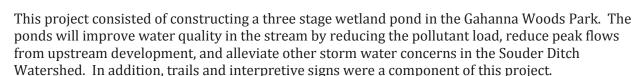
Detroit Street Rebuild (Lincolnshire Rd) – Every year, the City replaces Detroit style streets. Detroit style streets consist of all concrete pavement where the curb and street are poured as one unit. This style of street was originally installed decades ago. However, it is not designed for the addition of an asphalt surface. The asphalt surface causes curb drain outlets to be partially blocked.



Since the late 1980's, the City has been rebuilding Detroit style streets to eliminate the problems caused by the design. Detroit style streets are rebuilt to current street standards and include a concrete base, asphalt surface, and separate curb and gutter. The City currently has approximately 12 miles of Detroit style streets remaining. This equates to 8% of the entire roadway network.

The portion of Lincolnshire Rd from Empire Dr to McCutcheon Rd is one of the remaining Detroit style street segments (the remainder of Lincolnshire has already been rebuilt). It had deteriorated and was rebuilt in 2012.

Gahanna Woods Detention Basin – Residents downstream of the Gahanna Woods Park have experienced high flows during storm events. This in turn has caused stream bank erosion. In addition, the stream was found to have a high pollutant load. The Gahanna Woods Detention Basin was constructed to resolve these issues.









Asphalt Overlay – The purpose of asphalt overlay project is to prolong the life of City streets. The City uses a street rating system that is based on a scale of 1-100. It rates on four categories: extent of cracking, concrete condition, crack seal condition, and pavement defects (ie: potholes). All four categories contribute to the overall rating; however, the pavement defects category is weighted the heaviest because it relates to ride quality and maintenance costs.



Paving projects are targeted for streets where the majority of the pavement is in the range of 75 or below. The goal is to maintain all streets at or above the 75 rating.

The City maintains 134 centerline miles of roadway. Crack seal and slurry seal are temporary maintenance applications used to extend the life of asphalt pavements. When the paving surface has reached the end of its useful life, the asphalt is removed and replaced (also known as overlay, resurfacing, or paving). All residential streets receive a crack seal, slurry seal, and ultimately a resurfacing.

Curb ramps are replaced to meet current ADA standards on all streets that are resurfaced. Additional ramps will be constructed when necessary.

The purpose of the Engineering
Division is to perform design
functions in the matter of
construction, maintenance, and
capital improvement projects
undertaken by the City.